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BEFORE THE ARIZONA CORPORATION

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COMMISSIONERS

JEFF HATCH-MILLER, Chairman  
WILLIAM A. MUNDELL  
MARC SPITZER  
MIKE GLEASON  
KRISTIN K. MAYES

IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY  
FOR APPROVAL OF A POWER SUPPLY  
ADJUSTOR SURCHARGE.

DOCKET NO. E-01345A-05-0526

IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY  
FOR A HEARING TO DETERMINE THE  
FAIR VALUE OF THE UTILITY PROPERTY  
OF THE COMPANY FOR RATEMAKING  
PURPOSES, TO FIX A JUST AND  
REASONABLE RATE OF RETURN  
TEHREON, TO APROVE RATE SCHEDULES  
DESIGNED TO DEVELOP SUCH RETURN,  
AND FOR APPROVAL OF PURCHASED  
POWER CONTRACT.

DOCKET NO. E-01345A-03-0437

**NOTICE OF FILING  
STAFF RESPONSIVE TESTIMONY ON  
APPLICATION FOR POWER SUPPLY  
ADJUSTOR SURCHARGE**

Pursuant to the Procedural Order issued September 23, 2005, Staff hereby files the  
Responsive Testimony of William Gehlen on the Application of Arizona Public Service Company for  
Approval of a Power Supply Adjustor Surcharge in this docket.

RESPECTFULLY SUBMITTED this 17<sup>TH</sup> day of October, 2005.

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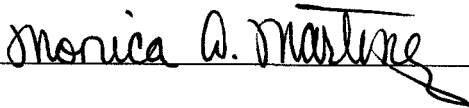
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**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER  
Chairman  
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Commissioner  
MARC SPITZER  
Commissioner  
MIKE GLEASON  
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KRISTIN K. MAYES  
Commissioner

IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. E-01345A-03-0437  
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A HEARING TO DETERMINE THE FAIR )  
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ARIZONA PUBLIC SERVICE COMPANY FOR )  
APPROVAL OF A POWER SUPPLY ADJUSTOR )  
SURCHARGE )

DIRECT

TESTIMONY

OF

WILLIAM GEHLEN

PUBLIC UTILITY ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

OCTOBER 17, 2005

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**EXECUTIVE SUMMARY**  
**ARIZONA PUBLIC SERVICE COMPANY**  
**DOCKET NOS. E-01345A-03-0437 & E-01345A-05-0526**

On July 22, 2005, Arizona Public Service Company ("APS" or "Company") filed with the Commission an application for approval of a Power Supply Adjustor ("PSA") Surcharge (Docket No. E-01345A-05-0526). The request was for recovery of \$100 million to be collected over a period of 24 months. Subsequent to filing its application, APS agreed with Staff and the Residential Utility Consumer Office ("RUCO") to defer \$20 million from this specific application. APS now requests recovery of \$80 million over a 24 month period.

On September 14, 2005, this matter was consolidated for purposes of hearing with the review of the PSA Plan of Administration under Docket No. E-01345A-03-0437.

The result of Staff's analysis indicates that the PSA Surcharge amount of \$80 million requested by APS is reasonable. A combination of factors including rapid load growth, significant shift to the use of natural gas fired generation, and unforeseeable increase in the price of natural gas due to tight market conditions have caused natural gas and purchased power costs to increase at unanticipated amounts, resulting in significant increases in the PSA balancing account. The initial APS filing on July 22, 2005, was made in anticipation of the under-collected amount in the PSA balancing account reaching \$100 million. The most recent APS filing shows an under-collected balance of \$127.5 million as of August 31, 2005, and a projected increase of approximately \$20 million for September 2005. This balance did not include effects of Hurricane Katrina (August 29, 2005) and Hurricane Rita (September 24, 2005) which are having additional upward pressure on natural gas and purchased power costs.

Hurricanes Katrina and Rita and their resultant damage to the natural gas infrastructure and drilling rigs have driven natural gas prices to levels not deemed possible six weeks ago, much less four months ago when APS made their initial filing. At this point it is not likely that the under-collected balance in the PSA balancing account will fall below \$100 million even with the approval of the \$80 million surcharge as requested by APS. Present projections show the PSA balancing account increasing by an amount equal to, or more, per month than the average \$3.33 million per month offset by the requested APS Surcharge for ten (10) of the fourteen (14) months from November 2005 through December 2006. When the hurricane damage assessment has been completed, the natural gas and purchased power markets are expected to stabilize. At that point Staff will be able to better forecast increases or decreases in the PSA to determine the long run effects on the Company and the customers.

Staff recommends approval of the APS \$80 million PSA Surcharge request to be collected over a 24 month period. The Surcharge is to be implemented the first billing cycle in November 2005. The impact on the average residential bill will be an increase of \$1.48 per month, (or 1.3%) during the summer months, and \$0.96 per month, (or 1.6%) during the winter months.

1     **INTRODUCTION**

2     **Q.     Please state your name, occupation, and business address.**

3     A.     My name is William Gehlen. I am a Public Utility Analyst V employed by the Arizona  
4           Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff").  
5           My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

6  
7     **Q.     Briefly describe your responsibilities as a Public Utility Analyst.**

8     A.     In my capacity as a Public Utility Analyst V, I provide recommendations to the  
9           Commission on energy related issues.

10  
11    **Q.     Please describe your educational background and professional experience.**

12    A.     I earned a BS degree in Business Administration from Aquinas College, and an MBA  
13           from Western Michigan University. My background includes 26 years of utility  
14           experience with 16 years in investor owned utilities. In the fuels area, I have been  
15           responsible for the planning, procurement and transportation of multiple fuel categories  
16           (natural gas, gasoline, coal, oil and nuclear). In addition, I have been responsible for the  
17           procurement of land, equipment, services, consulting and construction contracts, and  
18           purchased power (short, medium and long term). Management positions also included  
19           responsibility for integrated resource planning, long range forecasting, transmission  
20           planning, environmental affairs and strategic planning. My most recent 10 years  
21           experience includes 1 year with Office of Consumer Advocate for the State of Nevada as a  
22           regulatory analyst, and 9 years in the development and marketing of energy trading  
23           platforms, origination of purchase power agreements, real time energy trading, and  
24           support of merchant generators in gathering market intelligence on regulatory, fuel and  
25           product issues to aid in understanding inter and intra regional market design issues and  
26           solutions.



1     **Q.     What is the scope of your testimony in this case?**

2     A.     I will address the Arizona Public Service Company's ("APS" or "Company") request for a  
3           Power Supply Adjustor ("PSA") surcharge with a billing date to be effective the first  
4           billing cycle in November 2005. I will evaluate the costs attributable to the request, and  
5           put these costs into perspective in view of recent developments in the fuels and purchased  
6           power markets. Estimated customer cost increases will be developed and discussed. In  
7           addition, the impact of the Company hedging program will be addressed.

8  
9     **Q.     Describe the PSA Rate Mechanism.**

10    A.     In Decision No. 67744, a PSA Rate Mechanism was authorized for the Company. The  
11           purpose of the PSA is to track APS' costs of obtaining fuel for internal generation,  
12           revenue from off-system sales, and the costs of obtaining purchased power from the  
13           market. The actual costs of fuel and purchased power on an ongoing basis would be  
14           compared to the base cost of \$0.020743 per kWh (Base Fuel Recovery Amount)  
15           established in Decision No. 67744. The PSA permits the Company to defer for later  
16           recovery/refund, through the Adjustor Rate, 90 percent of the fuel and purchased power  
17           costs in excess of/below the amount recovered through the Base Fuel Recovery Amount.  
18           The major features of the PSA are: a 90 percent ratepayer/10 percent APS sharing  
19           mechanism, the recognition of off-system sales revenues, the inclusion of fuel and  
20           purchased power costs, a bandwidth on changes in the Adjustor Rate of plus or minus  
21           \$0.004 per kWh over the life of the PSA, a balancing account and a surcharge mechanism.

22  
23           The results of the PSA mechanism are applied to customer bills through the Adjustor Rate.  
24           The Adjustor Rate is to be reset April 1<sup>st</sup> of each year and maintained for a one year  
25           period. In subsequent years, the Company would file with the Commission on March 1  
26           their calculation for the Adjustor rate to become effective April 1 for the next 12 months.

1 Per Decision No. 67744, if the on going fuel and purchased power expense in the PSA  
2 reaches plus or minus \$50 million, as compared to the base Fuel Recovery Amount, the  
3 Company is required to file a request for Commission approval of a PSA surcharge/credit,  
4 or an explanation of why a surcharge/credit is not necessary. In addition a cap of \$100  
5 million was placed on the balancing account.

6  
7 **Q. Describe the Company's PSA Surcharge request.**

8 A. On July 22, 2005, the Company filed for approval of a PSA Surcharge due to a projected  
9 under-collection of its fuel and purchased power expenses of \$100 million by August 31,  
10 2005. The filing anticipated a surcharge of \$0.00177 per kWh with a recovery period of  
11 24 months and the surcharge to be effective the first billing cycle in November 2005,  
12 which would result in approximately a 2.2 percent revenue increase relative to the Base  
13 Fuel Recovery Amount of \$0.020743 per kWh for the requested two year amortization  
14 period. Subsequent to this request, the Company agreed with Staff and the Residential  
15 Utility Consumer Office ("RUCO") to defer \$20 million from the PSA Surcharge request  
16 from this specific filing. As a result, the surcharge request was reduced to \$80 million  
17 with a recovery period of 24 months and the same implementation date. The effective  
18 surcharge request is \$0.001416 per kWh and would result in approximately a 1.7 percent  
19 revenue increase relative to the Base Fuel Recovery Amount of \$0.020743 per kWh.

20  
21 **Q. Describe the review performed on the Company's application.**

22 A. The application was reviewed for reasonableness comparing natural gas and purchased  
23 power costs against known market information. In addition, a high level overview of the  
24 Company's natural gas, purchased power, coal and nuclear fuel procurement practices was  
25 performed through data requests and on site meetings with trading, procurement, hedging,  
26 and back office personnel.

1     **Q.     Was a prudence review performed?**

2     A.     No. With the removal from the application of \$20 million attributable to Palo Verde  
3             outages during the period April 1, 2005, through July 2005, the discussion of prudence has  
4             been deferred to a later date.

5  
6             A formal prudence review is typically performed during a rate case where there is time to  
7             adequately review the Company's policies and procedures, dispatch practices and  
8             software, compliance with contract provisions as well as to compare fuel and purchased  
9             power to market hubs such as Palo Verde, Henry Hub and futures markets such as  
10            NYMEX.

11  
12    **Q.     Did the procedural schedule allow time to perform a prudence review?**

13    A.     No. The estimated time to do a thorough prudence audit could approach six months plus  
14             require the services of outside consultants to address nuclear plant outages.

15  
16    **DRIVERS OF ENERGY COSTS**

17    **Q.     What factors are responsible for the rapid growth in the PSA account?**

18    A.     The majority of growth in the PSA account can be attributed to load growth, Company  
19             generation makeup, power market shift to gas generation, and price increases in  
20             generation feedstock (natural gas, coal, and nuclear). Also, the Base Fuel Recovery  
21             Amount of \$0.020743, which was based on 2003 actual costs, is not adequate to  
22             compensate for the fuel and purchased power market prices that have developed over the  
23             last two years. It is a combination of all the preceding factors that have driven up the PSA  
24             account to amounts that precipitated the filing for a PSA Surcharge.

1     **Q.     Discuss Company load growth.**

2     A.     The Company has experienced significant peak demand load growth, 600 MW over the  
3           last three years with an additional 300 MW forecasted for 2006. Figure 1 illustrates the  
4           growth in the APS peak load requirement for the period 2000 through 2005 as well as the  
5           projected 2006 peak. Load growth by itself does not necessarily result in uncollected fuel  
6           and purchased power costs when fuel costs are relatively stable and the on and off peak  
7           demands are relatively stable. The nature of the Company load during the summer is not  
8           stable, and based on the generation mix available to meet load the primary fuel source  
9           involved is natural gas for internally generated power and/or purchased power. The price  
10          of natural gas has had a direct correlation to the price of power required to meet peak load  
11          requirements.

12  
13    **Q.     Discuss the Company's generation mix and purchased power markets.**

14    A.     Since 2001 the Company has added 1800 MWs of generation. It has all been natural gas-  
15          fired generation. Figure 1 illustrates the APS generation mix and the growth in gas-based  
16          generation utilized to meet peak demand. The coal and nuclear generation totals, which  
17          have provided a moderating effect on the PSA account, have remained constant. The MW  
18          amount of the Company's coal and nuclear generation is relatively constant, while the  
19          amount and percentage of natural gas fired generation and gas based purchased power has  
20          continued to increase. Figure 2 illustrates the percentage shift by generation type and  
21          purchased power from 2000 through the third quarter 2005. This increasing reliance on  
22          natural gas-fired generation and gas-based purchased power increases the Company's  
23          exposure to volatile gas prices. When required to go to the market for purchased power,  
24          the market price is determined once again by the price of natural gas. Almost all new  
25          generation added by merchant generators is gas-fired, including 4000 MW of generation  
26          within the state of Arizona since 2002. This means that when the Company must go to the

1 purchased power market, now and for the foreseeable future, to meet load requirements it  
2 will pay a market price based on volatile gas prices.

3  
4 **Q. Discuss increases in fuel cost.**

5 A. The Company has experienced increased costs in all fuel areas as well as purchased  
6 power. The costs of coal and nuclear fuel have increased but at a much slower rate than  
7 natural gas. Figure 3 illustrates the relative cost increase per fuel type in the Company's  
8 fuel feedstock and purchased power mix. Using 2002 as a base year the cumulative cost  
9 increase for coal has been 18 percent, nuclear fuel 9 percent, natural gas 122 percent, and  
10 purchased power 67 percent. To a degree, the Company is able to exert some control over  
11 the coal and nuclear fuel costs because they are based on negotiated contracts that are  
12 primarily cost based and escalated on negotiated indices. The market price of natural gas  
13 presently has little to no correlation to cost of production. Neither the Company, nor  
14 anyone else, can control the price of natural gas at this time. It was apparent that natural  
15 gas is becoming a scarce commodity even prior to recent hurricanes; recent damage to  
16 drilling rigs, as well as other infrastructure, has added more uncertainty to the market and  
17 has resulted in gas prices that were viewed as impossible six months ago. See figure 4  
18 which illustrates the rapid run up in natural gas forward prices.

19  
20 **Q. Has the Company been able to mitigate natural gas and purchased power costs?**

21 A. Yes. The Company developed procedures in the late 1990's that were designed to limit its  
22 exposure to volatility in the fuel and purchased power markets. The program has evolved  
23 over the years as the development of relatively liquid commodity markets and financial  
24 equivalency contracts became available. The Company intended hedging to provide price  
25 stability, not profit maximization, and has strict hedging guidelines which prevent market  
26 speculation. In response to increased reliance on natural gas, accompanied by rapidly

1 escalating commodity prices, the Company in 2003 initiated a hedge plan that required  
2 near term (one year) gas and purchased power requirements, to be 75 percent hedged. In  
3 response to recent forecasted increases in market prices for gas and purchased power, the  
4 Company raised the hedge percentage to 85 percent for the last five months of 2005, and  
5 calendar year 2006. The Company is presently hedged 50 percent for 2007 and 35 percent  
6 for 2008. The amount of fuel and purchased power expense was reduced by  
7 approximately \$30 million during the four month period April 1 through August 1, 2005  
8 because of the Company's hedging activities. The Company hedging strategy has worked  
9 effectively to limit cost increases. Additional savings will accrue through years 2005 and  
10 2006, barring a complete collapse of the gas and purchased power markets.

11  
12 **Q. Is it possible to accurately predict the future price of natural gas and purchased**  
13 **power?**

14 **A.** No. Until the natural gas and purchased power markets know with any degree of certainty  
15 the extent of damage caused by recent hurricanes, the time frame for infrastructure repair  
16 and the extent of damage to drilling rigs, prices will remain high and volatile. See figures  
17 4 and 5 which illustrate market price increases in natural gas and purchased power. A  
18 clearer picture of where the gas and purchased power markets are headed could be more  
19 transparent by December 31, 2005. A better market view, and additional Company cost  
20 data, will provide the information base needed to effectively evaluate the amount of  
21 change to the Base Fuel Recovery Amount Adjustor Rate for implementation in April  
22 2006.

1   **Q.   Is it likely for the under-collected PSA account balance to fall below \$100 million**  
2       **without the PSA Surcharge requested by the Company?**

3   A.   No. Per Company provided cost information there is an under-collected fuel and  
4       purchased power expense of \$127.7 million for the period April 1, 2005, through August  
5       31, 2005. Of this amount, \$115.2 million has been deferred, and \$12.5 million has been  
6       paid for by Company stockholders, reflecting the 90/10 sharing of fuel costs mandated by  
7       Decision No. 67744. Figures 4 and 5 illustrate higher gas and purchased power market  
8       prices for September than for August which will result in the continued growth of the  
9       under-collected balance through the September reporting period. Additions to the under-  
10      collected balance should moderate for the last quarter of the year since the need for gas-  
11      fired generation and purchased power will decrease over the fall and winter shoulder  
12      months.

13  
14   **Q.   Is it likely for the under-collected PSA account balance to fall below \$100 million**  
15       **with approval of the PSA Surcharge requested by the Company?**

16   A.   No. The \$80 million surcharge requested by the Company is to be collected over 24  
17      months from November 2005 through April 2006. The under-collected balance will  
18      continue to grow during the September reporting period. Predicted peak load growth of an  
19      additional 300 MW for 2006 only increases the reliance by the Company on high priced  
20      natural gas and purchased power to meet load, the costs of which will most likely be  
21      higher than the Base Rate Fuel Amount and Adjustor Rate was designed to recover. The  
22      Company in their filing projected an under-collected balance at year end 2006 of \$255  
23      million with the Surcharge approval and an increase of 3 mills per kWh in the Adjustor  
24      Rate in April 2006. Without the Surcharge approval, the Company projects an under-  
25      collected amount of \$274 million with an increase of 4 mills per kWh in the Adjustor Rate  
26      in April 2006. Staff has reviewed the Company's projections and found them to be

1 reasonable. The year end 2006 under-collected balance amounts were based on August  
2 31, 2005, forward price curves for natural gas and purchased power (Figure 6 illustrates  
3 the growth in the under-collected balance through year end 2006). As of September 30,  
4 2005, the latest forward price curves show additional price escalation in both natural gas  
5 and purchased power through year end 2006. A more precise picture of under-collected  
6 balances will emerge from the upcoming review of actual Company cost data for the  
7 period April through year end 2005. This review will determine any change to be made in  
8 the Adjustor Rate which will have a direct correlation on the growth, or decline, in under-  
9 collected fuel and purchased power expenses going forward.

10  
11 **CUSTOMER IMPACT**

12 **Q. Has Staff examined the impact APS' proposed PSA Surcharge would have on**  
13 **customers' bills?**

14 **A.** Yes. Staff examined the impact of the surcharge on residential customers taking service  
15 on Rate Schedule E-12. E-12 is the Company's basic residential tariff which does not  
16 include demand charges. As of the end of September 2005, 416,095 residential customers  
17 were taking service on E-12. The E-12 rate (and rate structure) differ for summer and  
18 winter months. Also, the usage of E-12 customers differs substantially across the summer  
19 and winter. For these reasons, Staff examined the effect of the surcharge on E-12  
20 customers in a representative summer month and a representative winter month. Chart 1  
21 below is based on customer usage in July of 2005.



**Chart 1 Surcharge Impact on E-12 Summer Bills**

		<b>Customer Bill</b>	<b>Surcharge amount</b>	<b>Surcharge</b>
	<b>kWh</b>	<b>(no surcharge)</b>	<b>(\$0.001416/kWh)</b>	<b>% impact</b>
<b>Low Use</b>	785	\$ 80.27	\$ 1.11	1.39%
<b>Median Use</b>	818	\$ 84.13	\$ 1.16	1.4%
<b>Average Use</b>	1047	\$ 112.81	\$ 1.48	1.31%
<b>High Use</b>	1309	\$ 145.63	\$ 1.85	1.27%

Chart 2 below is based on customer usage from December 2004.

**Chart 2 Surcharge Impact on E-12 Winter Bills**

		<b>Customer Bill</b>	<b>Surcharge amount</b>	<b>Surcharge</b>
	<b>kWh</b>	<b>(no surcharge)</b>	<b>(\$0.001416/kWh)</b>	<b>% impact</b>
<b>Low Use</b>	508	\$ 46.16	\$ 0.72	1.56%
<b>Median Use</b>	531	\$ 47.89	\$ 0.75	1.6%
<b>Average Use</b>	677	\$ 58.84	\$ 0.96	1.63%
<b>High Use</b>	846	\$ 71.52	\$ 1.20	1.68%

Charts 1 and 2 show the Company's proposed surcharge's impact on E-12 customers with different usage characteristics. The Company's proposed surcharge will raise E-12 customers' summer bills by \$1.48 or 1.3 percent on average. APS' proposed surcharge will raise E-12 customers' winter bills by \$0.96 or 1.6 percent on average.

#### **SUMMARY OF TESTIMONY AND RECOMMENDATIONS**

**Q. Summarize your testimony and recommendations in the filing.**

A. Testimony addressed the Company load growth, generation mix, and increasing natural gas and purchased power costs. The preceding were evaluated in order to draw a correlation to the large under-collected balance in the Company PSA account. Analysis indicates the Base Rate Fuel Amount, which was based on 2003 cost data, is not adequate to compensate for a growing peak load requirement which is being met with gas-fired generation and purchased power. Natural gas prices have increased 58 percent while

1 purchased power prices have increased 45 percent during the period 2003 through the  
2 third quarter 2005. The \$80 million PSA Surcharge request is modest in comparison to  
3 the actual under-collected balance and should be approved. The impact on residential  
4 customers based on a 24-month recovery period will be an increase of \$1.48 per month,  
5 (1.3%) during the summer months and \$0.96 per month (1.6%) during the winter months.

6  
7 Staff understands that the Company's request represents a burden on the Company's  
8 customers. However, Staff does not believe rejecting or delaying the Company's  
9 application will result in any long-term benefit for those customers. If the Company's  
10 request were to be denied or deferred, the \$80 million in question would remain an under-  
11 collection in the balancing account, accrue interest, and would have to be recovered at a  
12 later date. Additionally, given the state of the natural gas market, the under-collected  
13 balance is likely to grow over the near term with, or without, approval of the Company's  
14 request (refer to Figure 6). Denying, or deferring the Company's current request will  
15 result in future Surcharge requests of even greater magnitude. Staff believes there is some  
16 value in addressing the current under-collection now so that the effect of increased fuel  
17 costs on the Company's customers can be spread over time.

18  
19 Because this proceeding did not include an evaluation of the prudence of the Company's  
20 fuel and purchased power purchases, approval of the Surcharge in this proceeding shall  
21 not impair the Commission's ability to consider whether such costs are imprudent or  
22 otherwise subject to disallowance in a later rate case or proceeding specifically intended to  
23 consider the reasonableness of costs associated with the Surcharge. In other words, should  
24 the Commission determine that costs allowed for recovery in the proceeding were  
25 imprudent or not recoverable; their allowance in this proceeding shall not prevent their  
26 subsequent disallowance and implementation of a true-up related to those costs. Such

1 findings could occur either in the Company's next rate case, or in a separate proceeding  
2 commenced specifically for that purpose.

3  
4 Therefore, Staff recommends approval of the Company's requested \$0.001416 per kWh  
5 Surcharge. Staff recommends that the Surcharge remain in effect until it collects \$80  
6 million or two years have elapsed from the date of Commission approval, whichever  
7 comes first.

8  
9 The complexity of the PSA balancing account, and rapid changes in fuel and purchase  
10 power costs require changes in the timing, and content of the PSA Report. The changes  
11 must enable quicker and more in-depth evaluations, of the PSA Balancing Account under  
12 and over-collected balances. To enable these improvements, Staff makes the following  
13 additional recommendations:

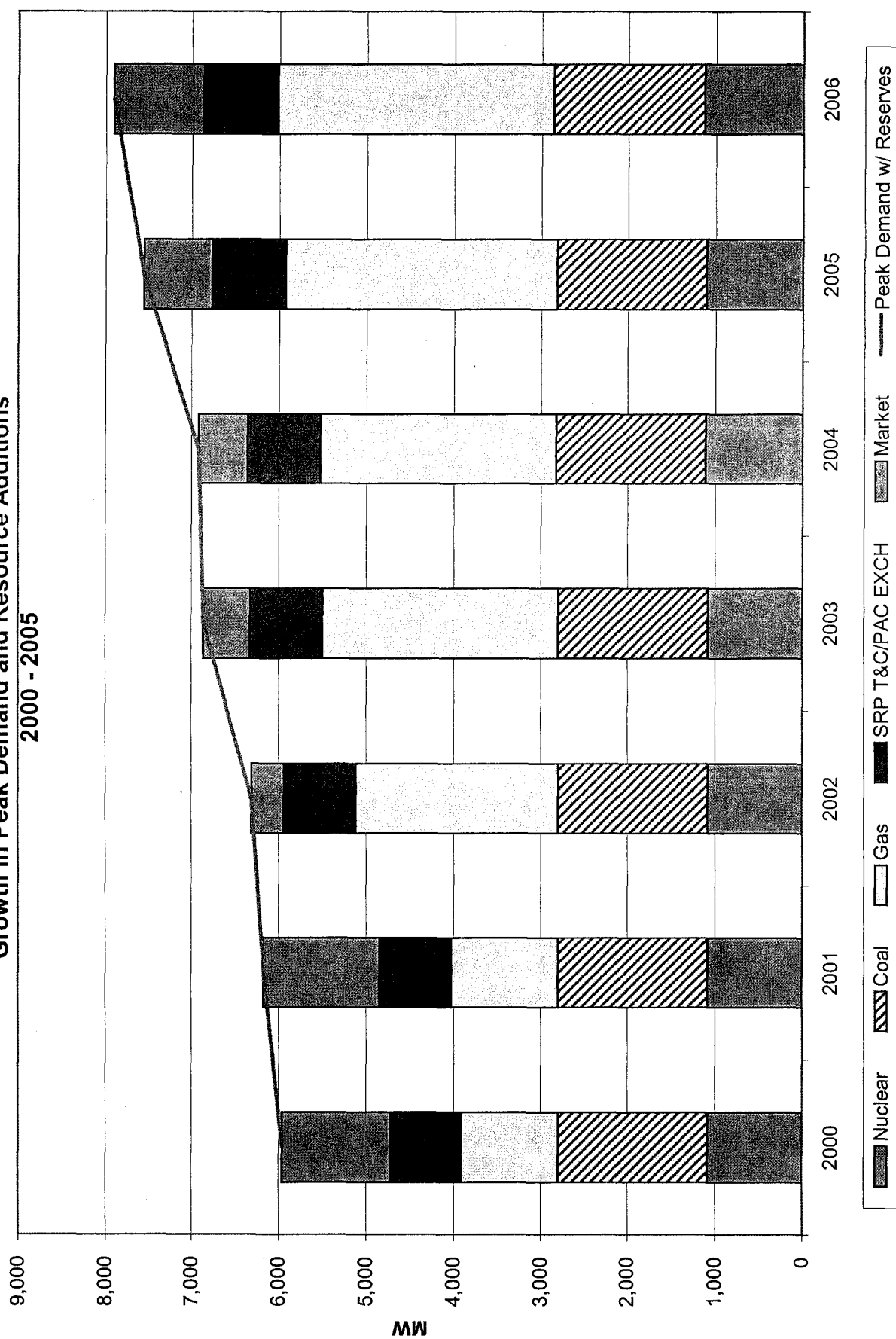
14  
15 APS provide the Power Supply Adjustor Report within thirty (30) days of the end of the  
16 reporting period. As an example, the August report would be due the last working day in  
17 September.

18  
19 APS provide in the Power Supply Adjustor Report any costs attributable to unplanned  
20 outages during the reporting period, and report these costs as a separate line item. Indicate  
21 whether the outage(s) are on-going, or completed.

22  
23 APS provide with the Power Supply Adjustor Report, a monthly projection for the next 12  
24 month period showing the estimated under/over-collected balance in the PSA balancing  
25 account utilizing the latest forward price curves for natural gas and purchased power.  
26 Provide in tabular and figure formats.

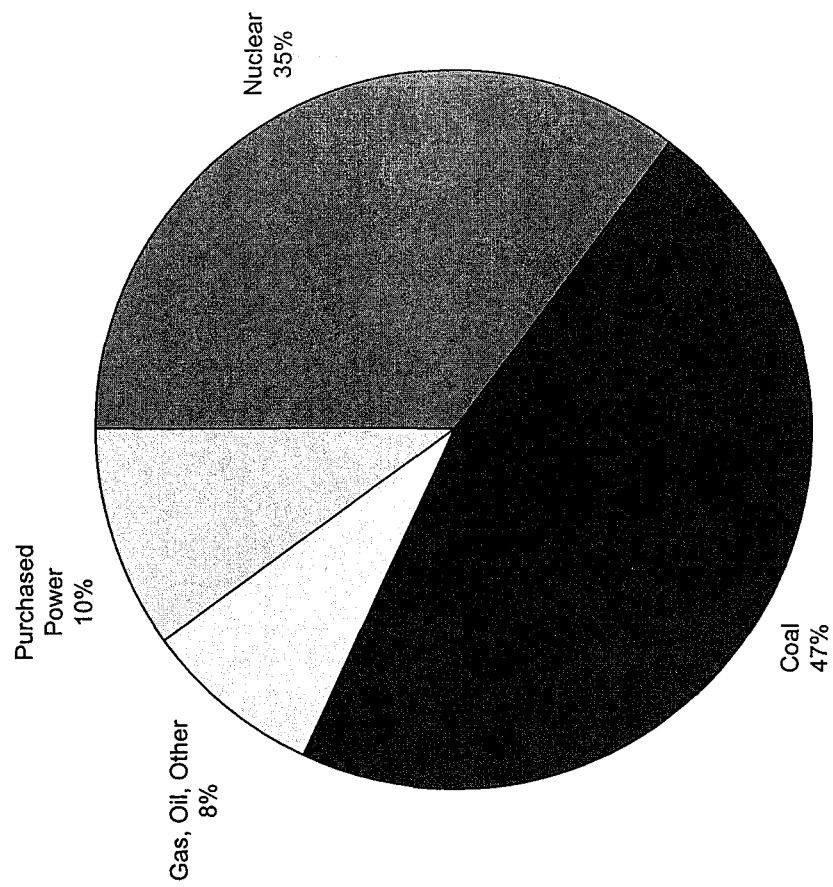
- 1   **Q.    Does this conclude your direct testimony?**
- 2   **A.    Yes, it does.**

Figure 1  
ARIZONA PUBLIC SERVICE COMPANY  
Growth in Peak Demand and Resource Additions  
2000 - 2005

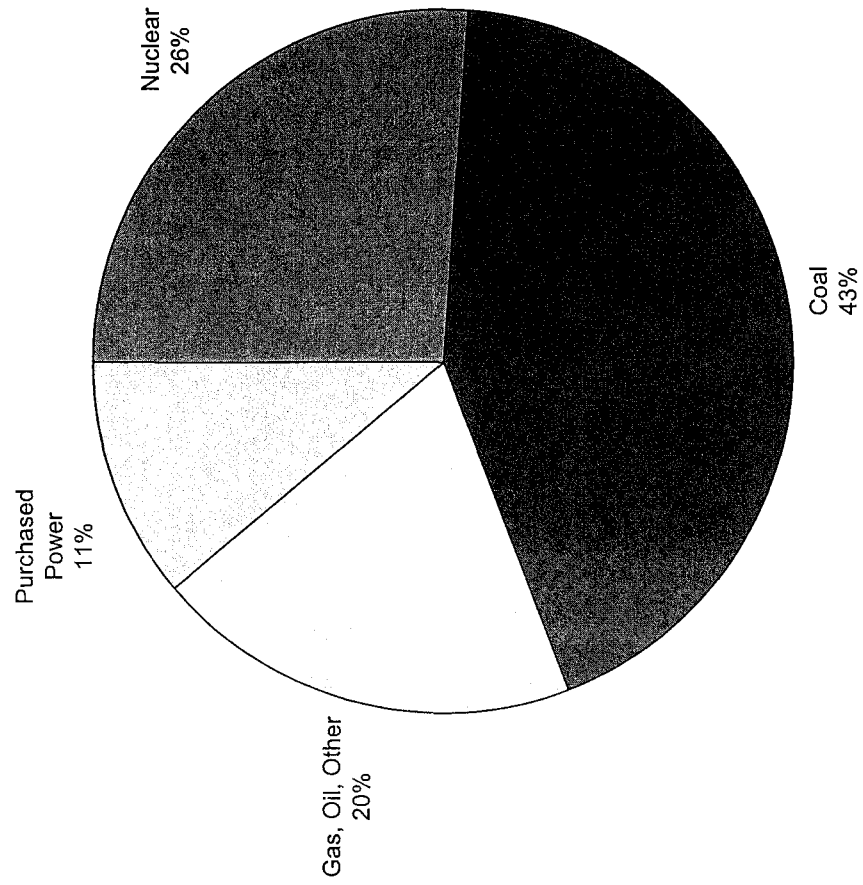


**Figure 2**  
**Arizona Public Service Company**  
**Energy Mix by Resource Type**

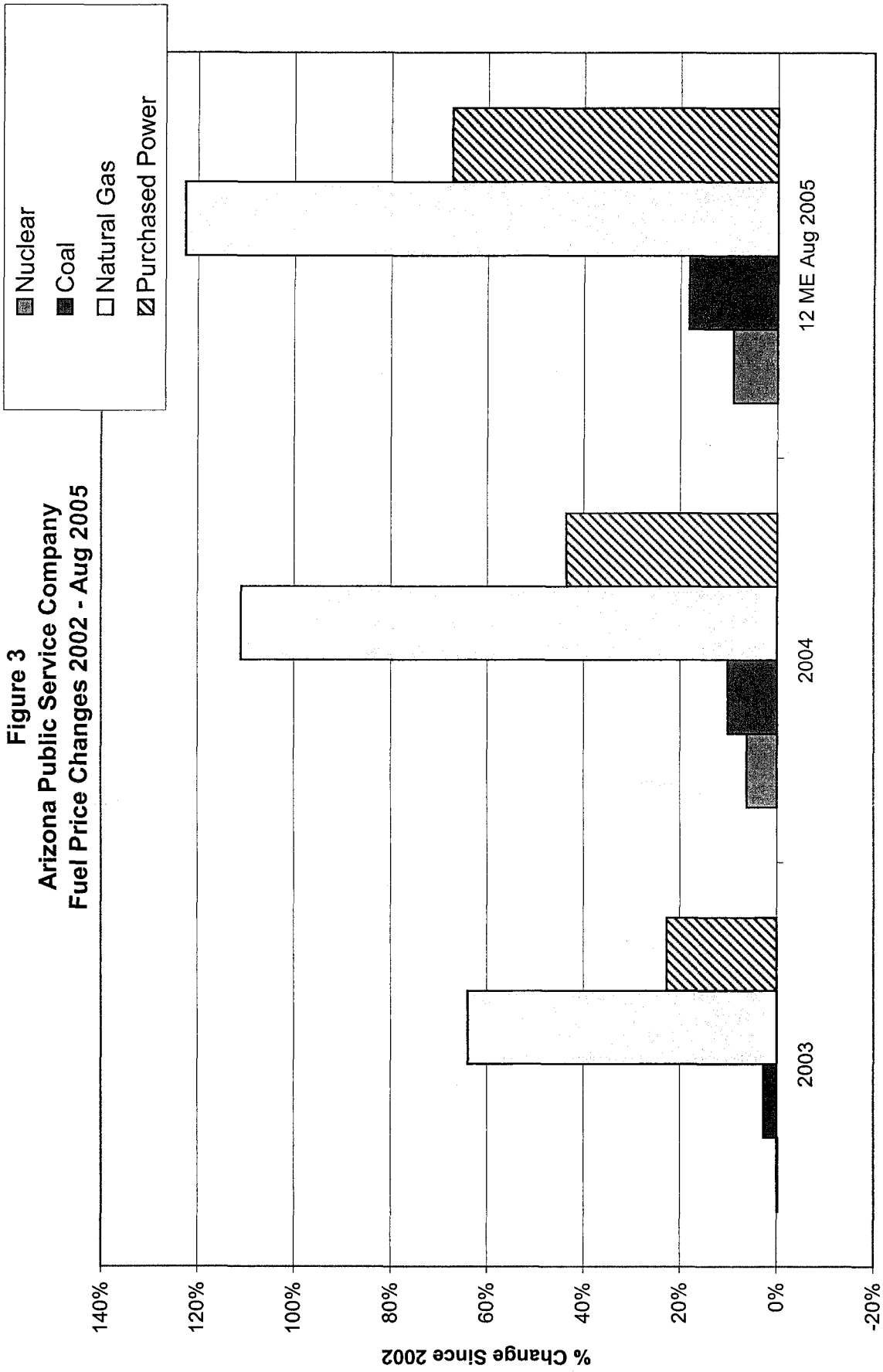
**2002**



**2005**



**Figure 3**  
**Arizona Public Service Company**  
**Fuel Price Changes 2002 - Aug 2005**



Note: Natural gas and power price changes do not include commodity hedging impacts.

Figure 4  
Henry Hub Natural Gas Price  
Market Prices for Forward Delivery Calendar Year 2005 - 2007

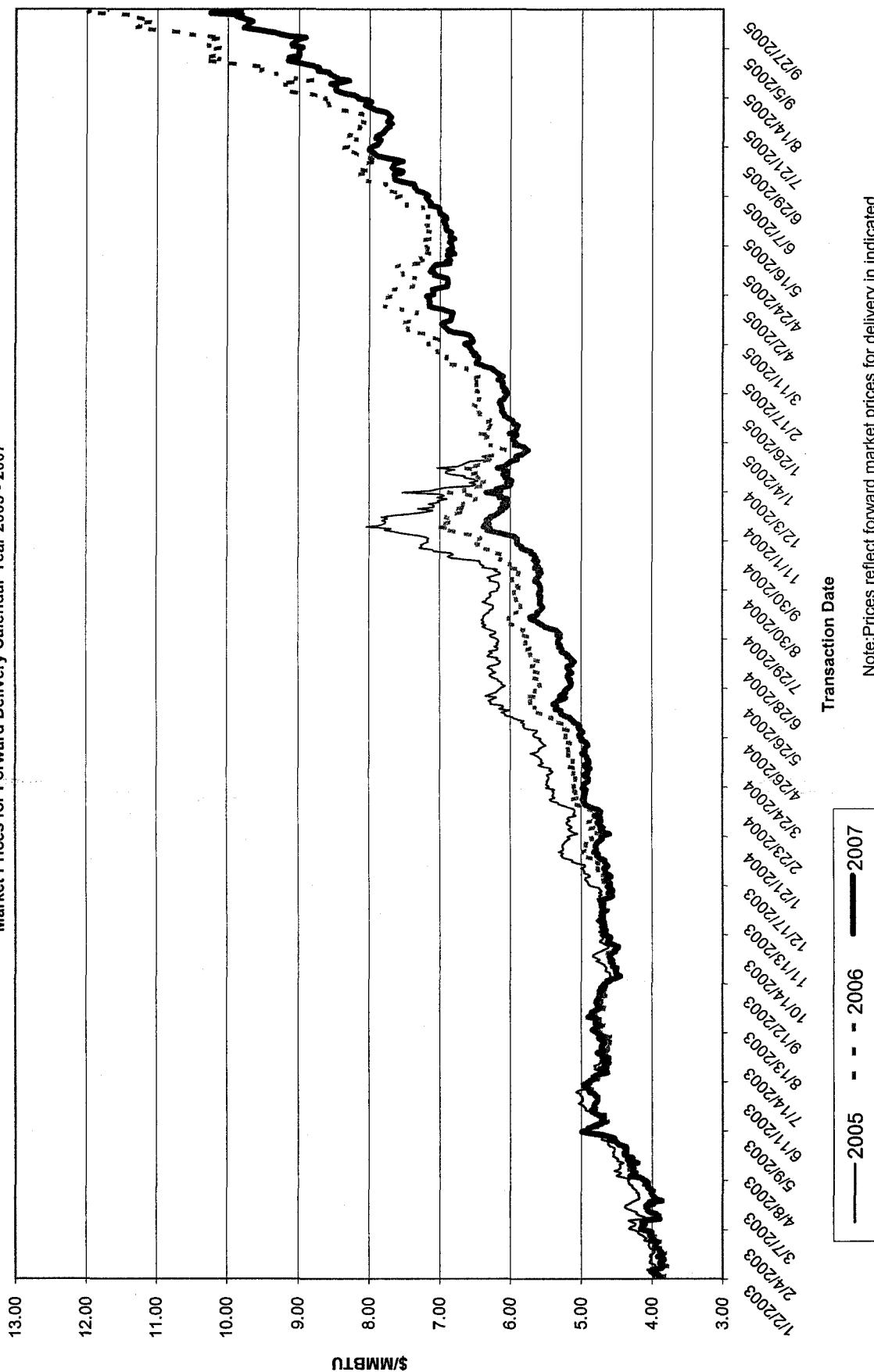
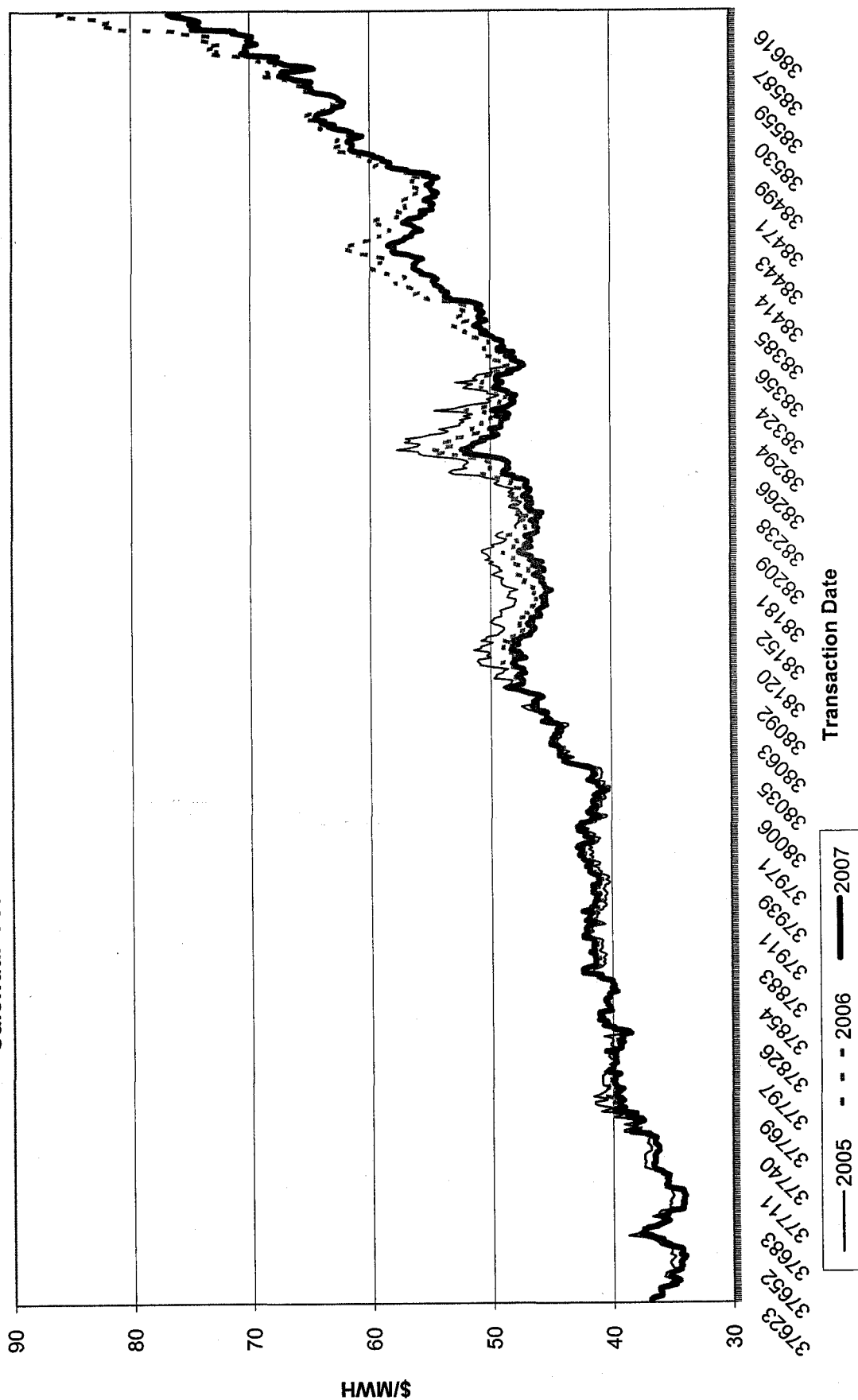




Figure 5  
Calendar Year Around-the-Clock Power Price Palo Verde



**Figure 6**  
**Projected Post-Sharing PSA Monthly Balances**  
**With and Without the \$.001416 Surcharge**

